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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/649,431	08/25/2000	Vladimir Andreevich Bushuev	62935/PJP	6866

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05/09/2003

Peter J Phillips
Cooper & Dunham LLP
1185 Avenue of the Americas
New York, NY 10036

EXAMINER

DOROSHENK, ALEXA A

ART UNIT

PAPER NUMBER

1764

19

DATE MAILED: 05/09/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application N .

09/649,431

Examiner

Alexa A. Doroshenk *A.A.O.*

Applicant(s)

BUSHUEV, VLADIMIR
ANDREEVICH

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mk-19

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 February 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 6 and 7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 6 and 7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on February 25, 2003 has been entered.

Response to Amendment

2. The amendment filed February 25, 2003 is objected to under 35 U.S.C. 132 because it introduces new matter into the disclosure. 35 U.S.C. 132 states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: the term and definition of a "ring-like shaped cavity" as well as the assertion that Fig. 3 demonstrates a torid-like cavity with two semi-cavities.

Applicant is required to cancel the new matter in the reply to this Office Action.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 6 and 7 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter

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which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The recitation of a "ring-shaped vortex-flow cavity" (claim 6) and "two ring-shaped vortex-flow cavities" (claim 7) are not supported by the specification or drawings and the examiner holds that such recitations in the claims are new matter.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claim 6 is rejected under 35 U.S.C. 102(b) as being anticipated by Dinulescu (4,265,732).

Dinulescu discloses an apparatus comprising:

a bladed (3) working wheel (2);

a cascade of stationary blades (4);

a hollow housing (5);

an inlet nipple (see fig. 2a) for supplying feedstock (col. 5, line 42);

an outlet nipple (see fig. 2a) for carrying-off cracked gas (see abstract);

wherein said working wheel and said cascade of stationary blades are located in said housing (see fig. 2a) to form a ring-shaped vortex-flow cavity for recirculation of pyrolyzed gas (col. 3, lines 1-7); and

wherein said inlet nipple and said outlet nipple are in communication with said cavity (see fig. 2a).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dinulescu (4,265,732).

Dinulescu discloses an apparatus comprising:

a bladed (3) working wheel (2);

a cascade of stationary blades (4);

a hollow housing (5);

an inlet nipple (see fig. 2a) for supplying feedstock (col. 5, line 42);

an outlet nipple (see fig. 2a) for carrying-off cracked gas (see abstract);

wherein said working wheel and said cascade of stationary blades are located in said housing (see fig. 2a) to form a ring-shaped vortex-flow cavity for recirculation of pyrolyzed gas (col. 3, lines 1-7); and

wherein said inlet nipple and said outlet nipple are in communication with said cavity (see fig. 2a).

Dinulescu is silent as to providing two cavities, but it has been held that to duplicated parts for a multiplied effect is not the type of innovation for which a patent

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monopoly is to be granted. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide multiple cavities in order to achieve a multiplied effect for operation of the apparatus. St. Regis Paper Co. v. Bemis Co., Inc., 193 USPQ 8, 11 (7th Cir. 1977).

Response to Arguments

9. Applicant's arguments filed February 25, 2003 have been fully considered but they are not persuasive.

Applicant argues that Dinulescu does not provide the presently claimed "ring-like shaped cavity which allows creation of a ring vortex flow inside the cavity" as apparent after study of figure 2b of the reference.

The examiner respectfully disagrees with applicant. Dinulescu does indeed illustrate of a ring-like cavity in figure 2a of the reference and discloses wherein the apparatus creates vortices in the apparatus (col. 2, line 61- col. 3, line 7).

Applicant's arguments with regard to claim 3 are moot as the claim is no longer under consideration.

Conclusion

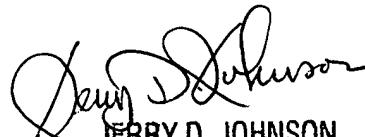
10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alexa A. Doroshenk whose telephone number is 703-305-0074. The examiner can normally be reached on Monday - Thursday from 9:00 AM - 7:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on 703-308-6824. The fax phone

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numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.


JERRY D. JOHNSON
PRIMARY EXAMINER
GROUP 1100

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May 7, 2003